# SECTION 407 BITUMINOUS PRIME AND TACK COAT

**407.01 DESCRIPTION.** This work is the furnishing and applying a bituminous material, and a blotter material if required, to an existing surface.

Prime coat is applying a bituminous material to a prepared aggregate or soilsurface roadway before placing bituminous surfacing.

Tack coat is applying a bituminous material to a constructed bituminous or concrete surface before placing a bituminous surfacing.

### **407.02 MATERIALS**

**407.02.1 Bituminous Material.** Furnish bituminous material meeting Section 702 requirements for the type and grade specified.

The Project Manager may change or substitute the type and grade of bituminous material to be used under Subsection 402.03.7.

A one step change in grade will not change the unit price.

The Contractor may substitute CSS-1 emulsified asphalt for SS-1 emulsified asphalt for tack coat.

**407.02.2 Blotter Material.** Blotter material is material with 100% passing the  $\frac{1}{2}$ -inch (12.5 mm) screen and having a PI of 6 or less.

### 407.03 CONSTRUCTION REQUIREMENTS.

**407.03.1 Weather Limitations.** Apply prime and tack coat to a dry surface during daylight hours, and when the ambient temperature is 50  $^{\circ}$ F (10  $^{\circ}$ C) or higher.

Apply the prime or tack coat after the Project Manager has approved the surface to receive the bituminous material.

Apply tack coat subject to the surface conditions and weather limitations in Subsection 401.03.6.

407.03.2 Equipment. Use equipment meeting Subsection 410.03.1 requirements.

**407.03.3 Application of Bituminous Materials.** Apply bituminous material as specified in Subsection 410.03.4, except as modified or supplemented by this subsection.

The 3% moisture requirement in Subsection 410.03.2 is not applicable.

The Project Manager will establish the bituminous material application rate.

Apply water as directed to the aggregate base surface before the surface is primed.

Treat only one-half of the roadway width in one application.

Do not exceed the specified quantity of bituminous material at spread junctions. Correct excess or deficient coated areas to the specified application rate.

Apply emulsified asphalt for tack coat as specified by the Project Manager up to a maximum rate of 0.1 gallon per square yard (0.45 L per m²). Maintain from 1 to

3 parts of water to 1 part of emulsified asphalt. The Project Manager will determine the exact proportions.

**407.03.4 Application of Blotter Material.** Spread, and compact if required, blotter material over primed surfaces as directed.

Sweep or blow excess blotter material onto the shoulders and in-slopes before placing subsequent bituminous surfacing courses. Remove and dispose of all excess material on adjoining curbs and gutters.

**407.03.5 Maintenance of Surface.** Maintain the prime or tack coated surface until covering with subsequent surfacing.

Repair all defects, deterioration or disintegration of the underlying surfacing course or courses as directed.

**407.03.6 Traffic Control and Protection of Highway Structures.** Furnish traffic control meeting the approved traffic control plan and Section 618.

Furnish highway structure protection as specified in Subsection 410.03.9.

### 407.04 METHOD OF MEASUREMENT.

**407.04.1 Bituminous Material.** Bituminous material is measured by the gallon (Liter) or the ton (metric ton), as specified, under Subsection 402.04.

**407.04.2 Blotter Material.** Blotter material is measured by the ton (metric ton) or cubic yard (cubic meter).

**407.04.3 Surface Repair.** The surface repairs in Subsection 407.03.5 are not measured for payment except as follows:

The Project Manager may direct priming the surface before a winter shutdown. All traffic related damage areas during the shutdown period that are repaired are measured for payment at the appropriate contract unit prices, including additional materials.

**407.04.4 Miscellaneous.** Water for diluting emulsified asphalt used in the work is not measured for payment.

**407.05 BASIS OF PAYMENT.** Payment for the completed and accepted quantities is made under the following:

Pay Item
Bituminous Material
Pay Unit
Gallon (liter) or Ton (metric ton)

Blotter Material Ton (metric ton) or Cubic Yard (cubic meter)

Payment at the contract unit price is full compensation for all necessary resources to complete the item of work under the Contract.

## BITUMINOUS PRIME AND TACK COAT

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The bituminous material quantities in the Contract are estimated and may be increased or decreased with no adjustment of the contract unit prices.

The blotter material quantity in the Contract is estimated and may be increased or decreased with no adjustment in the contract unit price.